

Application No.: 10/760,665

Docket No.: 65857-0120

Please insert the following paragraph after paragraph [0039]:

FIG. 33 is a cross-section view of a clutch brake according to a further embodiment.

Please replace paragraphs [0044], [0050] and [0053] with the following:

[0044] As shown in the embodiment of FIGS. 1 and 2, brake housing 44 is adapted to be received into an opening 54 in transmission housing 40. A flange 56 on brake housing 44 prevents clutch brake 30 from falling through opening 54 and a number of fasteners 58, such as bolts or the like, non-movably secure transmission housing 40 to a component of driveline system 32, such as a portion of the transmission for example. In a particular implementation of the invention, brake housing 44 is installed in an SAE No. 2 transmission housing 40 and is configured with one or more chamfers 60 that accommodate and secure the front bearing seals of a mating transmission. In this configuration, brake housing 44 replaces the traditional bearing cap used to retain the front bearing seals of the transmission. However, brake housing 44 may exhibit configurations other than the configuration shown in FIGS. 1-3, particularly when clutch brake 30 does not need to function as a bearing cap. As best seen in FIG. 33, an alternative embodiment of brake housing 44 includes a brake housing 444 adjacent a bearing cap 450 that includes a chamfer 460 to secure the front bearing seals of a mating transmission.

[0050] Referring to FIGS. 19 and 20, a clutch brake 130 according to another embodiment of the present invention is shown. In the illustrated embodiment, clutch brake 130 is substantially similar to clutch brake 30 described above with at least one exception, namely, clutch brake 130 includes at least two sources of magnetic flux 148A and 148B. To accommodate the two sources of magnetic flux, clutch brake 130 includes a brake housing 144 having an inner annular groove 166A and an outer annular groove 166B. As shown in FIGS. 22-25, outer annular groove 166B is positioned radially outward of holes 162 and voids 164 in brake housing 144. To maintain the two distinct magnetic fields (153A and 153B in FIG. 20) associated with each source of magnetic flux 148A and 148B, armature plate 52 may include a number of circumferentially extending arcuate slots 83 (*see also* FIGS. 12 and 13). As shown in FIG. 20, the position of slots 83 inhibits the lines of magnetic flux in one magnetic field from short-circuiting through armature plate 52 and into the neighboring magnetic field.

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[0053] As shown in the embodiment of FIGS. 28 and 29, housing 322 also includes a number of spaced apart quill flanges 324. The gaps between quill flanges 324 are sized to allow passage of a number of brake flanges 326 on a brake housing 344 of clutch brake 330. Once quill 314 is positioned over brake housing 344 and rotated, brake flanges 326 are radially aligned with quill flanges 324 on quill housing 322. Furthermore, holes 325 become aligned with holes 351 in armature 350 and holes 362 in brake housing 344. The bolts 358 that fasten clutch brake 330 to the driveline system also generate a clamping load that sandwiches quill flanges 324 between brake flanges 326 and transmission housing 318.

Marked-up versions of paragraphs [0044], [0050] and [0053] are as follows:

[0044] As shown in the embodiment of FIGS. 1 and 2, brake housing 44 is adapted to be received into an opening 54 in transmission housing 40. A flange 56 on brake housing 44 prevents clutch brake 30 from falling through opening 54 and a number of fasteners 58, such as bolts or the like, non-movably secure transmission housing 40 to a component of driveline system 32, such as a portion of the transmission for example. In a particular implementation of the invention, brake housing 44 is installed in an SAE No. 2 transmission housing 40 and is configured with one or more chamfers 60 that accommodate and secure the front bearing seals of a mating transmission. In this configuration, brake housing 44 replaces the traditional bearing cap used to retain the front bearing seals of the transmission. However, brake housing 44 may exhibit configurations other than the configuration shown in FIGS. 1-3, particularly when clutch brake 30 does not need to function as a bearing cap. As best seen in FIG. 33, an alternative embodiment of brake housing 44 includes a brake housing 444 adjacent a bearing cap 450 that includes a chamfer 460 to secure the front bearing seals of a mating transmission.

[0050] Referring to FIGS. 19 and 20, a clutch brake 130 according to another embodiment of the present invention is shown. In the illustrated embodiment, clutch brake 130 is substantially similar to clutch brake 30 described above with at least one exception, namely, clutch brake 130 includes at least two sources of magnetic flux 148A and 148B. To accommodate the two sources of magnetic flux, clutch brake 130 includes a brake housing 144 having an inner annular

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groove 166A and an outer annular groove 166B. As shown in FIGS. 22-25, outer annular groove 166B is positioned radially outward of holes 162 and voids 164 in brake housing 144. To maintain the two distinct magnetic fields (153A and 153B in FIG. 20) associated with each source of magnetic flux 148A and 148B, armature plate 52 may include a number of circumferentially extending arcuate radial slots 83 (*see also* FIGS. 12 and 13). As shown in FIG. 20, the position of slots 83 inhibits the lines of magnetic flux in one magnetic field from short-circuiting through armature plate 52 and into the neighboring magnetic field.

[0053] As shown in the embodiment of FIGS. 28 and 29, housing 322 also includes a number of spaced apart quill flanges 324. The gaps between quill flanges 324 are sized to allow passage of a number of brake flanges 326 on a brake housing 344 of clutch brake 330. Once quill 314 is positioned over brake housing 344 and rotated, brake flanges 326 are radially aligned with quill flanges 324 on quill housing 322. Furthermore, holes 325 become aligned with holes 351 in armature 350 and holes 362 in brake housing 344. The bolts ~~358~~ ~~258~~ that fasten clutch brake 330 to the driveline system also generate a clamping load that sandwiches quill flanges 324 between brake flanges 326 and transmission housing 318.